

## COMMUNICATION TOPICS AND STRATEGIES IN E-MAIL CONSULTATION: COMPARISON BETWEEN AMERICAN AND INTERNATIONAL UNIVERSITY STUDENTS

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### ABSTRACT

On today's "wired" college campuses, students avail themselves in increasing numbers of electronic channels, most notably e-mail, as a means to consult with their professors. While some research has investigated the purposes for which university students communicate with their instructors via e-mail, little research has examined differences in e-mail use between American and international students. In the present study, e-mail messages sent by American and international students enrolled in a teacher-preparation program to their professor were collected over the course of one semester. The messages were examined for three major communication topics (facilitative, substantive, relational) and communication strategies (requesting, negotiating, reporting). Results indicate quantitative and qualitative differences in American and international students' e-mail topics and strategies, suggesting, similar to findings for face-to-face academic advising sessions, that American students demonstrate greater initiative and ability to adapt to the spatial and temporal remoteness between interlocutors in e-mail interaction, especially when using e-mail to solicit face-to-face appointments and input on projects. Findings also show that messages from both groups of students contained substantial relational communication, perhaps in an attempt to compensate for the lack of visual and paralinguistic clues in the e-mail medium.

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### INTRODUCTION

Over the past decade, communication via e-mail has increased dramatically in all domains of social interaction: at work, between friends, and in educational institutions. At universities and colleges, e-mail assumes a number of different functions, including the delivery of materials as well as course management (Haworth, 1999; Poling, 1994; Shetzer, 1998; Worrels, 2002). In the United States, e-mail has also become one of the major and most frequently used ways for students to consult with faculty and is thus replacing, to some extent, the more traditional face-to-face office hours (Abdullah, 1998; Kirkley, Savery, & Grabner-Hagen, 1998; Tait, 1999; U.S. Department of Education, 1997; Walther, 1994). Students avail themselves in increasing numbers of office hours in cyberspace which electronic mail can provide to accomplish a variety of purposes. It is a convenient means for students to reach faculty who are not on campus every day and whose office hours may not fit into students' schedules.

As with any technology, there are advantages and difficulties faced by students and faculty in online interaction (Atamian & DeMerville, 1998; Bonk & King, 1998; Crouch & Montecino, 1997; Gatz & Hirt, 2000; Hara & Kling, 1999; Haworth, 1999; Poling, 1994; Shetzer, 1998; U.S. Department of Education, 1997; Wallace & Wallace, 2001; Worrels, 2002). Among the advantages are transmitting assignments, obtaining announcements quickly, and getting instructor input between classes; disadvantages are absence of paralinguistic clues, uncertainty of successful electronic transmission of messages, and lags in response time, or lack of interactional coherence (Benbunan-Fich & Hiltz, 1999; Crouch & Montecino, 1997; Herring, 1999a).

Moreover, the introduction of e-mail into traditionally face-to-face domains such as student-faculty interaction also confronts users with challenges of what is appropriate to do in this medium (Baron,

2002). Particularly in the academic world, where students and faculty have unequal roles by virtue of their institutionally different positions (Bardovi-Harlig & Hartford, 1990, 1993b), uncertainty among students about what topics are acceptable to address with faculty via e-mail and which stylistic conventions to follow is likely. Pragmatics research has traditionally looked to native speakers (NSs) as representing norms for language use and has interpreted non-native speakers' (NNSs) language behaviors as deviations from the native speaker norm. At universities in North America, most international students do not know expected conventions for face-to-face interaction, which are often at odds with their own cultural expectations (Gee, 1999).

While it is also likely that international students are not aware of appropriate rules of interaction and language use in online media (Bloch, 2002), it has been claimed that new technology also poses problems for *native* speakers and leaves them uncertain about which language functions can appropriately be accomplished via e-mail, and how these functions should be encoded in an e-mail message (Baron, 2002, in press; Herring, 2002). Thus, crafting appropriate e-mail messages is more than a question of pragmatic competence of non-native speakers; it is also a question of how native speakers adapt language in a new environment that has, as of yet, no clear-cut rules as to how student-professor communication via e-mail should be carried out appropriately. This leaves e-mail-using students, native and non-native alike, with plenty of guesswork each time they sit down at their computers and compose e-mail messages, especially ones that are directed not at friends and equals, but at their professors.

Some research on e-mail use between students and faculty has examined communication topics American students, largely undergraduates, raise (Collins, 1998; Haworth, 1999; Martin, Myers, & Mottet, 1999; Payne, 1997; Poling, 1994) and the purposes for which non-native students in English as a second language courses use e-mail with their instructor (e.g., Bloch, 2002). Other research has focused on students' learning style preferences and related e-mail use (e.g., Kelly, Duran, & Zolten, 2001; Kunderewicz, Michener, & Chambliss, 2001), and on gender differences in computer-mediated communication (Herring, 1994, 1996a, b, 1999b, 2000). However, there is no research which compares the topics that American students address with faculty in this medium with those that international students address, the frequency with which topics are addressed, nor the communication strategies that either group may use. The purpose of the present study, therefore, was to examine the following questions:

- For which communicative purposes do students use e-mail with faculty?
- Are these communication topics acceptable to address via e-mail?
- What communicative strategies do students use in their e-mails?
- Do differences in American and international students' e-mail use with faculty exist?
- If so, do these differences mirror differences observed for face-to-face academic advising sessions, and/or differences in the way students adapt to the interactional limitations of the e-mail medium? (cf. Bardovi-Harlig & Hartford, 1990, for research on academic advising sessions)

This study can provide insights into context-specific pragmatic differences within the student-to-faculty e-mail interaction between American students and international students, for whom English is not the first language, but it can also provide an important contribution to the growing research on how different types of computer-mediated communication affect "language and communication, ... interpersonal relations, and ... group dynamics, as well as the emergence of social structures and norms" (Herring, 2002, p. 111). It can also contribute to our awareness that non-native as well as native speaker language use can be affected by concerns about pragmatic appropriateness when conventions for a new communication technology are still in flux.

## REVIEW OF LITERATURE

### E-mail Use in Academia

Research on e-mail use in the academic domain can be divided into those studies that have surveyed students about their e-mail use in academic courses (Gatz & Hirt, 2000; Haworth, 1999; Kelly, Duran, & Zolten, 2001; Kunderewicz, Michener, & Chambliss, 2001; Martin, Myers, & Mottet, 1999; McKeage, 2001; Ronau & Stroble, 1999), and those that have analyzed students' actual e-mail messages (Bloch, 2002; Collins, 1998; Haworth, 1999; Marbach-Ad & Sokolove, 2001; Payne, 1997; Poling, 1994). In general, both strands have found that students respond favorably to using e-mail as an additional means of communication in their courses and indicate that e-mail may improve teacher-student communication and student learning (Atamian & DeMerville, 1998; Collins, 1998; McKeage, 2001; Ronau & Stroble, 1999; Yen, 1999).

The various surveys about students' e-mail use identified a wide range of topics that students claimed they address with faculty in e-mail messages. The most extensive of these studies is that of Martin, Myers, and Mottet (1999). The researchers identified 24 reasons for why students communicate with their professors, which they grouped into five main communication categories: *relationship* -- to build a relationship with the professor; *functional reasons* -- to get information/advice about course materials; *excuses* -- to address late work, absences, and challenge grades; *participation* -- to show interest in and understanding of course material; and *sycophancy* -- to "get on the instructor's good side" (p. 160).

Ronau and Stoble (1999) identified 10 content topics the student teachers they surveyed addressed, but they did not identify the functional purposes for which students may have sent their messages; thus their categories, such as classroom management, testing and grading, and lesson ideas, cannot easily be used across studies for comparison. However, they did observe that students frequently tended to use e-mail in order to set up face-to-face meetings perhaps because e-mail contact "did not provide the richness necessary for meaningful interactions" (p. 47).

Of the studies examining actual student e-mail messages, a variety of coding schemata emerge. Poling's (1994) qualitative analysis determined the following categories but it is unclear with which frequency students addressed these: asking questions about course content; asking for advice; asking about homework, upcoming quizzes or tests; and making excuses for missing class. These are similar to the functional reasons and excuses categories identified by Martin, Myers, and Mottet (1999).

A broad framework is suggested by Payne (1997) in her analysis of e-mail communication with graduate students. She identifies two major categories of student-to-faculty topics addressed via e-mail: facilitative (i.e., concerned with arrangements for meetings and conference calls, the submission of study plans, evaluation of work) and academic (i.e., questions of substance about resources, formats and organization for written work, and developing insights and points of view), but like Poling (1994), she does not identify relational messages through which students might seek to establish rapport with the professor. Collins (1998) identified four main categories of e-mail use in his undergraduate class: test related, assignment approvals, system related, and content related, which appear to overlap with Payne's (1997) categories. Marbach-Ad and Sokolove (2001) identified two main categories: questions/comments about class content and procedural questions, both of which also appear to overlap with Payne's categories. Interestingly, none of the studies examining actual student e-mail messages appears to have identified messages in which students tried to establish relational ties with faculty, although it is possible that they were subsumed in other categories.

While the coding categories in these studies are not the same and address broad purposes as well as narrow functions, and while the frequency with which each function was addressed is unclear, what the studies do have in common is that they all examine communication purposes of students in general -- it is unknown if international students were enrolled in the respective classes. One study examining

international students' e-mail interaction with faculty is that by Bloch (2002). He identifies four uses for these students' e-mail to faculty: asking for help, making excuses, making requests, and phatic communication, which is not "intended to carry real information but rather [is] used to maintain ... relationships" (p. 124). A similar category, *relationship*, was distinguished by Martin, Myers, and Mottet (1999), but was not identified in any of the other studies.

None of the studies investigating students' e-mail purposes and topics examines pragmatic consequences of the topics students address via e-mail and how they address them, and none raises the questions whether or not all topics were considered equally appropriate to raise in physically and temporally remote e-mail interaction. Bloch (2002) acknowledges that misunderstandings may occur in e-mail between students and faculty because non-native speakers "may not be ... familiar with the norms and values of [the] target culture or ... may not have the linguistic ability to express the subtle meanings that can be difficult to express in written language" (p. 122). Some of the purposes for which students use e-mail with faculty may be considered less appropriate than others. For example, asking for help and establishing a relationship may be frowned upon in an academic culture where individual effort is valued, and getting on the instructor's good side -- the *sycophancy* category in Martin, Myers, and Mottet (1999) -- may be thought of negatively as anecdotal evidence from comments by the researcher's colleagues suggests.

By the same token, the studies reviewed here do not address the potential impact the e-mail medium may have on how students present communicative purposes in e-mail messages. Research by Herring (1999a, 2003) and Condon and Cech (1996a) indicates that users adapt to the e-mail medium and its interactional limitations, such as message lags, through "[discourse] management strategies that pack more information into fewer utterances" (para. 2). However, such research has not yet examined if and what type of differences exist between native speakers of English and learners of English.

### **Pragmatic Differences Between American and International Students in Academic Discourse Environments**

Research by Bardovi-Harlig and Hartford (1990, 1993a, b) has focused on comparative analyses of native speakers and non-native speakers in student-professor office hour advising sessions. While focusing on face-to-face conferences only, their investigations point out the pragmatic difficulties that international students have when interacting in status-noncongruent situations with faculty. Academic advising sessions, as well as e-mail conferences, represent "complete authentic conversations with consequences for both [interlocutors]" (1990, p. 472), in which the professor has a higher status by virtue of his/her rank as a faculty member, expertise in the field, and institutional familiarity. In this interaction, students have a dual status: They have to play an appropriately subordinate role but must demonstrate independence of opinion, both of which need to be encoded appropriately linguistically in order to preserve status (Gee, 1999). Bardovi-Harlig and Hartford (1990) observed a number of differences between American students and international students in academic advising sessions, which suggested that international students (i.e., non-native speakers of English) lacked specific pragmatic knowledge to make the sessions successful. Boxer (2002) points out the far-reaching repercussions that pragmatic infelicities in the educational domain can have: Students run "the risk of not gaining the help required in order to succeed in their education" (p. 158). However, with the language demands of a new medium and the uncertainty of what is appropriate to consult a professor about and how this should be encoded, pragmatic infelicities may be likely for American students as well.

### **Pragmatic Differences in American and International Students' E-mail Messages**

In a study of students' e-mail messages, Hartford and Bardovi-Harlig (1996) examined the effect of requests produced by both NSs and NNSs on two faculty recipients of these messages. As in their research on advising sessions, they observed pragmatic infelicities in international students' messages due to inappropriate mitigation and lack of status-congruent language use. This may even be exacerbated

through the typographical possibilities afforded by the keyboard, such as use of all lower case letters, use of upper case letters for emphasis, and arrangement of the message on the screen (Danet, 2002).

Research by Biesenbach-Lucas and Weasenforth (2000, 2001) similarly indicates that international students at North American universities are unfamiliar with sociolinguistic conventions of e-mail use in an academic setting as the following examples show:

If it's possible, will you give an extension for more days ? Please..... Please.....

I want to know the results of final exam so please let me know as soon as possible.

Please give me some feedback whether it is negative or not. To make sure if you checked it or not, I'll give you a call.

Here is the outline of the teaching demon video and please comment on it!

However, American students may be equally challenged by the rhetorical demands of communicating online appropriately and effectively with faculty. Common sources of difficulty, for all students, may be overcoming the lack of paralinguistic cues (Atamian & DeMerville, 1998) as well as knowing what communication topics are appropriate to engage in with a professor via e-mail, let alone how to encode these linguistically. Many international students -- and American students -- are faced with another difficulty and perhaps ambiguity: the common perception that e-mail promotes a less formal register, which has been said to be a common characteristic of online communication (Biber, 1992; Danet, 1999, 2002). Thus, students may find themselves torn between two conflicting demands: that of increased informality of e-mail and that of status-congruent language use with faculty. As research has indicated, inappropriate linguistic realizations in students' e-mails do invite negative affective reactions from faculty recipients (Biesenbach-Lucas & Weasenforth, 2001; Hartford & Bardovi-Harlig, 1996).

Further studies on student-faculty e-mail interaction suggest that American students, unlike international students, may use e-mail in ways that might contribute to academic success (Biesenbach-Lucas & Weasenforth, 2000, 2002): American students used e-mail to send attachments of assignment drafts to their instructors, asking for feedback before handing in a final draft; in contrast, international students tended to use e-mail largely as a means to submit the final draft, but not to solicit instructor input along the way. Also, American students were found to negotiate project topics in their e-mails more frequently and effectively than international students by providing elaborations on topic choices.

The goal of the present study was to identify the various purposes of e-mail messages of American and international students sent to an American professor during one semester. A major objective was to examine the communication topics addressed in the students' e-mail to the faculty member, the strategies used to encode these, and to compare the American students' e-mail use to that of the international students.

## METHODOLOGY

### Data and Participants

The data for this study were comprised of 125 student-initiated e-mail messages, sent by students enrolled in graduate level teacher training courses at a major American university during one semester to their professor. Only initial student messages were considered, not sequenced, sustained exchanges, since such messages need to "accomplish more than one function" (Condon & Cech, 1996b, p. 80) due to the physical remoteness of the interlocutors and lack of immediate professor response. Sustained, ongoing e-mail exchanges exhibit a variety of discourse and coherence building features, such as the copied and pasted portions of the e-mail that is replied to in the responding e-mail message, and these were not the focus of the present study. Since a student would expect an immediate response from the professor in a face-to-face consultation, the physical and temporal remoteness of an e-mail consultation requires the

student to request such a response clearly -- otherwise, the professor may not provide any response, at least not immediately (Collins, 1998; Condon & Cech, 1996b). While e-mail consultations allow students to initiate the dialogue with the professor, similar to face-to-face office hours, the peculiarity of e-mail interaction requires the student to take a leadership role in this temporarily one-sided exchange, that is, the student needs to express his or her needs, initiate the topic, provide background independently (Bardovi-Harlig & Hartford, 1990) -- this being a jointly constructed, cooperative event in a face-to-face encounter (Gallego, 1997). Bardovi-Harlig and Hartford (1990, 1993a, b) found that international students differed from American students in the reluctance they displayed, particularly with respect to self-initiated suggestions; thus, a similar difference in self-initiated topics and their elaboration (see Biesenbach-Lucas & Weasenforth, 2000, 2002, for findings on greater elaboration in American students' project proposals) might surface in e-mail consultation as well.

Among the messages investigated, 71 were sent by American graduate students in a TESOL teacher training program at a major American university; 54 messages were sent by international students, all from Asian countries (Korea, Japan, Taiwan, Thailand), in the same program. The proficiency level of the non-native students was low-advanced; the students had achieved the required minimum TOEFL score (550) to take classes in an American university program, and most had been in the United States for about one year. While all students were familiar with the procedures of sending and receiving e-mail, some students may have been more computer-literate than others, and some students enrolled in the semester during which the e-mail messages were collected -- native speakers as well -- did not send any e-mail messages at all, perhaps pointing toward the ambivalence that often accompanies use of a new channel of communication (Baron, in press, 2002).

The researcher in the present study was the professor to whom the messages were sent. This represents a unique one-to-one communication situation that is underrepresented in computer-mediated communication research (Danet, 2002; Davis & Brewer, 1997; Herring, 2002). The e-mail messages under investigation also represent "data from authentic interactions ... available for analysis without the presence of the researcher biasing the data collection process" (Herring, 2002, p. 145). Students completed informed consent forms, which explained to students that their e-mails would be stored for analysis and that no personal information would be revealed. Permission was also obtained for quoting messages or parts of messages, and identifying information other than native and non-native speaker of English status was masked (King, 1996; Sharf, 1999). In agreement with IRB requirements, messages containing sensitive or confidential information were not used in the analysis (only one such message was sent).

### **Analysis Framework**

Students' e-mail messages were examined for the communication topics and communication strategies used to realize these. Communication topics were assigned to students' e-mail messages based on general communicative goals and reflected categories adapted from Payne (1997), Collins (1998), Martin, Myers, and Mottet (1999), and Bloch (2002). Each communication topic subcategory was examined for communication strategies integral to consultation via e-mail (see Bardovi-Harlig & Hartford, 1990, for their analysis of advising sessions, which similarly considered only speech acts "integral to the advising session," p. 479).

The messages were coded by two researchers; inter-rater reliability was 86%. In cases where the two coders did not agree, each case was discussed until agreement was reached.

### **Communication Topics**

The following communication topics were identified:

**Facilitative.** This relates to scheduling appointments, submission of work, class attendance, self-identification, and message confirmation; for example,



I would like to meet with you during the week of November 2, in the morning (before 1:00 PM) if possible.

I mailed my final paper this morning.

I tried to make the class today but i guess i was like half an hour too late.

**Substantive.** This relates to clarification of assignments, content and format of work, resources, and evaluation of work; for example,

[This book] is called Basic Grammar Worksheets, by Andy Jackson and Audrey Jackson (1995). Can I use this book for the textbook evaluation?

When the question asks, "How would you evaluate this lesson plan?" does that mean what do I think of the lesson plan or does it mean what criteria do I use to evaluate it?

The general topic I am interested in is in relation to the various teaching methods that have been used to teach deaf students English and which methods have been the most successful.

How was my final portfolio going?

**Relational.** This relates to communication topics whose primary purpose is to maintain the social relationship between the parties involved in the interaction (Walther, 1992) but do not address a facilitative or substantive communication topic. Relational messages could be divided into two types: those that addressed course-related matters and resemble messages that Martin, Myers, and Mottet (1999) identify as *sycophancy*, and those that are phatic and grease social relationships and resemble messages that Bloch (2002) identifies as phatic as well. For example,

<i>Course-related</i>	I'm enjoying the course immensely! I have been musing over our class discussions regarding scoring.
<i>Phatic</i>	I hope you enjoyed your Thanksgiving break. Good luck with your grading.

Relational messages also include aspects of social protocol, including greetings and closings, and sign-off phrases, such as the following:

Dear Professor X,  
Hi Dr. X  
Sincerely yours,  
Regards,

In the subsequent analysis of communication topics, social protocol was, however, not included in the counts of communication topics. This would artificially inflate the number and percentage of messages exhibiting relational aspects as the majority of messages included greetings and closings; these are therefore shown separately.

### **Communication Strategies**

Due to the lack of face-to-face context and lack of interactional coherence in e-mail, students need to be more explicit and concise (Atamian & DeMerville 1998; Condon & Cech, 1996a; Herring, 1999a) in order to make the topic as well as the purpose of their message transparent to their professor, especially in initiated, not responsive, messages. If the message is not explicit enough, the professor may not be able to provide an optimal response, or the message may turn into a lengthy sequenced exchange before a desired response is obtained (Collins, 1998). In addition, since it can be assumed that in a face-to-face consultation, students' goals would be to obtain an immediate response from their instructor, students need to communicate this goal quite clearly, yet politely, and in status-congruent manner (Bardovi-Harlig

& Hartford, 1990, 1993a, b). Therefore, each communication topic subcategory was examined for the following communication strategies: requesting, reporting, and negotiating, each corresponding to Bardovi-Harlig and Hartford's (1990) categories of requesting, providing history, and making suggestions, respectively. The label "negotiating" was adopted here in order to capture the nature of the one-sided e-mail messages in which interactional turns typical of face-to-face negotiation can be collapsed in one e-mail turn to avoid a potentially lengthy exchange (Condon & Cech, 1996a).

Requests for the professor's response were further subdivided into explicit requests for response and other requests, such as for information, professor's input, permission. Examples of explicit requests for response include the following:

Please let me know if you get this message.

I do need to get your response on this.

I'll check my e-mail this week for your response.

Examples of other requests are,

If it is somehow possible, I would like to turn in a student writing sample to you this Friday.

I'd appreciate some feedback on my choices [of textbooks when I come to see you].

The *reporting* strategy was realized through declarative statements with clearly informative illocutionary force; when using this language function, students typically provided brief progress reports on work in progress or about to be started. For example,

I plan to write my second observation report on this topic.

I was working on the post-observation questions.

I've written up my log and have some thoughts on how to prepare a lesson.

When *negotiating*, students laid out planned agendas for how they intended to go about a certain assignment (Biesenbach-Lucas & Weasenforth, 2000, 2002). In addition, negotiations could include response options for the professor, or could be followed by a request for approval or permission from the professor to proceed with the plan, as the final sentence in second example shows:

The paper I have in mind would compare the different lingo the three major Christian groups (Catholic, Protestant, and Eastern Orthodox) use, and the convergences and divergences. I have some personal experience with the lingo of all three, but I think most people don't.

I'd like to discuss the scope of the report. Since there are ten subtopics, I was hoping to limit the scope and do a compare-contrast essay on a few key points. I'd like to discuss this approach with you and get your thoughts.

## FINDINGS AND DISCUSSION

### Communication Topics

The analysis of the e-mail messages of the American and international students reveals that both groups initiated communication via this medium with their professor to accomplish facilitative and substantive purposes, but they also addressed relational purposes (see Figure 1). One message could address one or more of these communication topics, as shown in the following two examples, respectively:

<i>Facilitative</i>	Could I meet with you at 3:30 on Monday? [student name]
<i>Social protocol</i>	Dear Dr. [name],
<i>Course related</i>	I have done some more thinking about the final project



<i>Facilitative</i>	and would like to come by on ... to discuss it further
<i>Substantive</i>	I have focused on grammar books over the past few decades ... and noticed a number of changes: ... Perhaps I could explore to what extent grammar texts have become communicative and when that change began to occur.
<i>Social protocol</i>	Thanks, [student name]

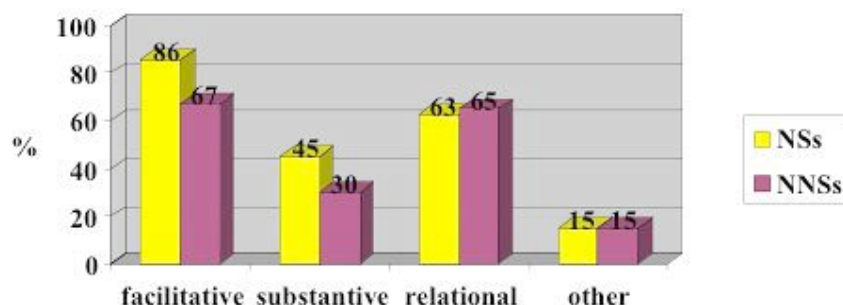


Figure 1. Percentage of communication topics in students' e-mail messages

Figure 1 indicates that when students sent messages to their professor, a large percentage of their e-mails contained, although not exclusively, facilitative topics (i.e., messages that dealt with scheduling an appointment, with submission of work, and attendance-related matters). Nearly 90% of the messages sent by the American students contained such information, while two thirds of the messages sent by the international students had this same communicative goal. Similarly, nearly half the e-mails from American students also addressed substantive matters such as clarification, format, and/or content of an assignment (see Marbach-Ad & Sokolove, 2001, for findings on substantive communication), while less than one third of the international students' e-mails did the same. Thus, as far as facilitative and substantive topics were concerned, a much larger percentage of American than international students initiated e-mail dialog with their instructor in these two subcategories, using this medium in lieu of, or in addition to, face-to-face consultations (see Haworth, 1999, for a similar observation on e-mail as "both a substitute and complement to alternative means of contact," p. 57). The difference between American and international students is comparable to that observed by Bardovi-Harlig and Hartford (1990, 1993b) in academic advising sessions where American students were more likely to initiate suggestions in the advising routine. At North American universities, responding to course and program related matters falls within the duty of faculty (Hartford & Bardovi-Harlig, 1996), and thus facilitative and substantive aspects represent acceptable e-mail communication topics that students can raise.

It is interesting to note that, for both groups of students, facilitative matters prevailed: Both American and international students addressed only half as many substantive topics as facilitative topics in their e-mail messages to their professors. An answer to this phenomenon surfaces when facilitative topics are examined more closely (see section [Facilitative Communication](#)).

As Figure 1 also shows, two thirds of the messages from American (63%) and international students (65%) contain relational communication, not including social protocol expressed in greetings and closings, which are shown in Figure 2. The relatively high percentage of relational communication in the students' e-mail messages emphasizes the perceived importance by both groups of establishing and maintaining a good relationship with the professor in this physically as well as temporally removed interaction. This suggests that despite the absence of visual clues, and despite the physical and temporal remoteness, the students' use of e-mail still promoted relational communication similar to that which may occur in face-to-face communication, as if the addition of relational information could help overcome the spatial and temporal limitations.

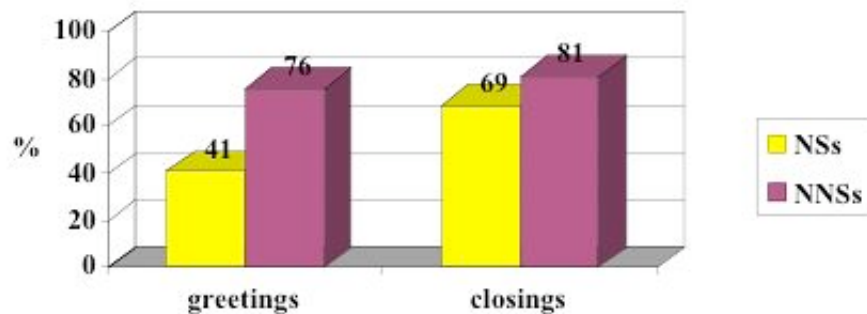


Figure 2. Percentage of messages exhibiting social protocol

Figure 2 indicates that social protocol, specifically greetings and closings, occurs in a larger percentage of messages from international students; American students are apparently less concerned about closing phrases than international students, and even less concerned about opening greetings, perhaps because this information is already provided in the "virtual envelope" of the e-mail message's memo-style header (Danet, 2001, p. 53; Gains, 1999; Li, 2000). The ubiquity of social protocol suggests that, for both groups of students, the consulting situation as well as the perceived status of the professor in such situations (Bardovi-Harlig & Hartford, 1990, 1993a, b; Gallego, 1997; Payne, 1997) dictate adherence to the social aspects of the interaction.

### ***Facilitative Communication***

Figure 3 shows the findings for the subcategories of facilitative communication. It is striking that for American students two types of facilitative communication predominate: About half of all messages dealt with scheduling an appointment and submitting assignments, some of which involved requests for permission of late submission; the other categories were negligible. In contrast, while international students also sent e-mails to their professor in order to address scheduling and work submission questions, the difference between the two groups is marked: While one out of two messages from American students dealt with scheduling a meeting about substantive matters (see Ronau & Stroble, 1999, for similar findings about scheduling face-to-face meetings via e-mail), only one out of four messages from international students addressed the topic of meeting with the professor. By taking the initiative to arrange a meeting, typically outside of the regular office hours, American students may increase their chances of successfully completing assignments by actively soliciting time for feedback with the professor. For example,

Is there any time, before next Thursday, when I can go over my evaluation form with you?

I would like to meet with you during the week of ... if possible.

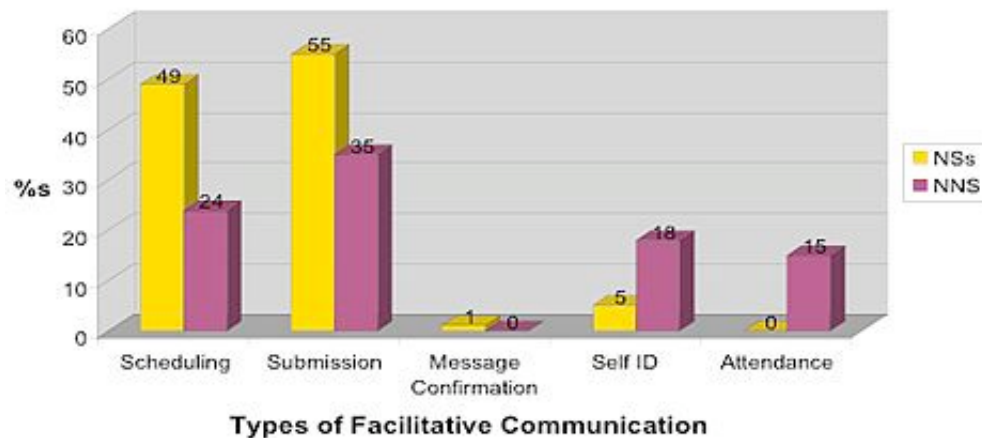


Figure 3. Percentage of messages exhibiting facilitative communication

Even though professors have office hours, those allotted time slots may be busy, may be cancelled, or not fit in the student's schedule. Thus, by addressing these concerns via e-mail, the student increases his/her chance for a guaranteed time slot with the professor (Biesenbach-Lucas, 2000). The findings in this study show that international students do not take similar initiative as American students and may not consider e-mail acceptable for this purpose. Some of the students commented that they assumed they were expected to figure out assignments and projects for themselves, and consulting the professor would be considered an admission of weakness and ignorance that would not be acceptable in the students' native academic culture. Such anecdotal evidence would need to be examined in a study more focused on students' assumptions regarding acceptable e-mail use between students and faculty.

Similarly, Figure 3 shows that one out of two messages from American students dealt with (often late) submission of work, a face-threatening act to the student, which can be mitigated through the distancing effect of e-mail (Baron, 1998; Davis & Brewer, 1997). In contrast, only one in three international students used e-mail for this purpose. Due to the face-threatening nature of a request for late submission, this may not likely be addressed in face-to-face office hours but from the safe distance of the computer instead, while international students may consider any request for late submission unacceptable. The following examples are from NS messages:

So to be pragmatic, could I possibly plan to hand in the rewrite of the observation, as well as my project in one more week, that is around Dec. 14<sup>th</sup>?"

I should have asked you sooner... I wanted to know if it is possible to hand in the last two observation reports this Thursday? I am really under a lot of pressure at work...

In many cases, American students also considered informing the professor ahead of time of planned submissions that were outside the regular class work, possibly in an attempt not to impose unannounced work that would require feedback. Fewer international students used e-mail for this purpose. Examples of American students messages are the following:

I was wondering if I can submit to you whatever I have available for my portfolio so that you can look over it during breaktime.

I realize that your time is very limited..., but I would like to submit drafts of my portfolio before the holiday break (or during the break -- if that is more convenient for you).

### **Substantive Communication**

As Figure 4 demonstrates, substantive communication in the students' e-mails was broken down into addressing the following purposes: clarification of assignments, format/organization issues,

content/development of viewpoint in assignments, available or usable resources, and evaluation of work previously submitted. More messages from American students than international students addressed aspects of content, clarification, and format, while the reverse trend was found for matters of resources and evaluation (but note that the percentages are much smaller for these substantive topics than for the facilitative topics discussed previously).

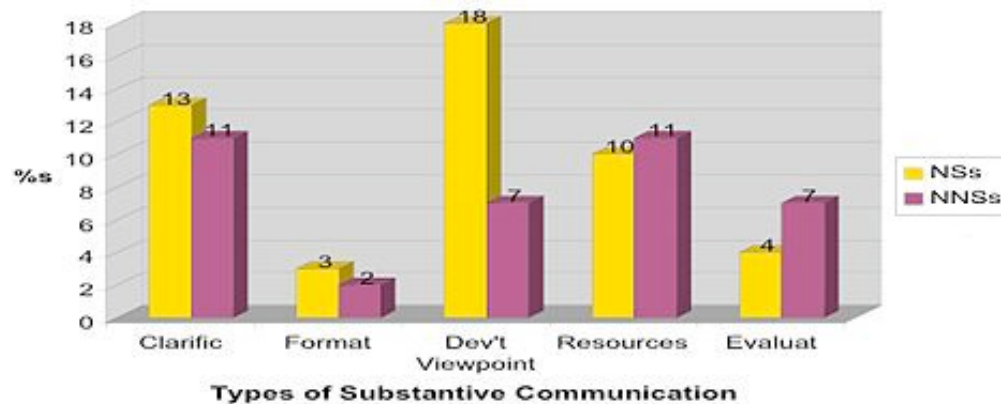


Figure 4. Percentage of messages exhibiting substantive types of communication

Among the five categories, development of viewpoint showed the greatest difference between the two groups of students (18% vs. 7%). This means that American students addressed content matters nearly three times as often as international students in their e-mail messages. As seen before, American students demonstrated somewhat greater initiative by requesting additional feedback on content through this medium rather than solely relying on written feedback on a submitted task (which occurs after the fact and cannot be incorporated into a current draft) or feedback during face-to-face office hours. In contrast, it is interesting that about twice as many international as American students asked for evaluation of final drafts previously submitted; and some of the international students admitted that they were surprised that it was considered acceptable by their professor to submit drafts for feedback.

Figure 4 also shows that aspects of format and organization played a minimal role for both groups of students, which might be due to the difficulty of addressing formatting aspects if the professor does not have the student's work in front of him/her; thus, it may be hard to provide this type of feedback electronically and thus this topic may be considered inappropriate for e-mail consultation.

However, the percentages for both groups in all substantive categories were very small, around 11%. Coupled with the fact that nearly every other message addressed scheduling questions, this may suggest that students still perceived a great need for meetings with their professors despite the fact that feedback on content aspects, clarifications of assignments, format aspects and the like could potentially all be addressed in cyberspace. Thus, e-mail may either not be perceived as equally effective when compared with face-to-face consultations (Ronau & Stroble, 1999), or students may feel that it is inappropriate to ask for in-depth advice via e-mail. This may change from semester to semester as students become more familiar with using e-mail as a means to consult with faculty (Collins, 1998; Haworth, 1999), and would need to be corroborated through a survey of students' attitudes toward e-mail use as a consultation alternative with faculty.

### **Relational Communication**

Figure 1 showed the occurrence of relational language, that is, language used to maintain and develop social relations as well as to show interest in the course, in students' messages. It shows that nearly two thirds of all messages from both groups of students contained relational expressions (63% and 65%).

Face-to-face interaction is typically accompanied by social and relational language, as well as non-verbal clues, whose function is the maintenance of social ties between interaction participants (Walther, 1992). When considering face-to-face office hour consultations, students would be expected to follow a certain social protocol, which includes greetings, some small talk, and leave-taking at the verbal level (Bardovi-Harlig & Hartford, 1990; Gallego, 1997). Much of the language used to accomplish these purposes is in fact quite formulaic and conventionalized. An absence of such social language, that is, a student barging into an office hour and immediately proceeding to substantive or facilitative communication, is likely to be considered rude in American academic culture.

However, too much social talk going beyond simple protocol, either unrelated to the courses a student is enrolled in or striking the professor's ego too heavily, may take away from the facilitative and substantive purposes student-faculty interaction is supposed to accomplish and may not be appropriate in academic e-mails. Students' expectations for relational language in communication with their professor are likely to be quite different depending on the students' cultural backgrounds (e.g., the tradition of giving gifts to a professor often exhibited by Asian students, which is in contrast to American students' behavior).

The differences in how relational language was employed by the two groups of students become more apparent when considering relational language dealing with course-related aspects and dealing with phatic small talk (Figure 5). A slightly larger percentage of messages from American students addresses course-related aspects through relational language, comparable to Martin, Myers, and Mottet's (1999) category of *sycophancy*, through which students are trying to get on the instructor's good side by saying positive things about the course, teaching, or course materials. In contrast, a greater number of e-mails from international students contained phatic language reminiscent of small talk. However, the fact that nearly every other message from both groups contained phatic communication points to the fact that students apparently strive to build a rapport dimension into a medium that is devoid of visual and paralinguistic clues. It is possible that in the absence of such clues, relational language becomes an important conveyor of the positive tone, perhaps even status-congruence, of students' e-mail messages.

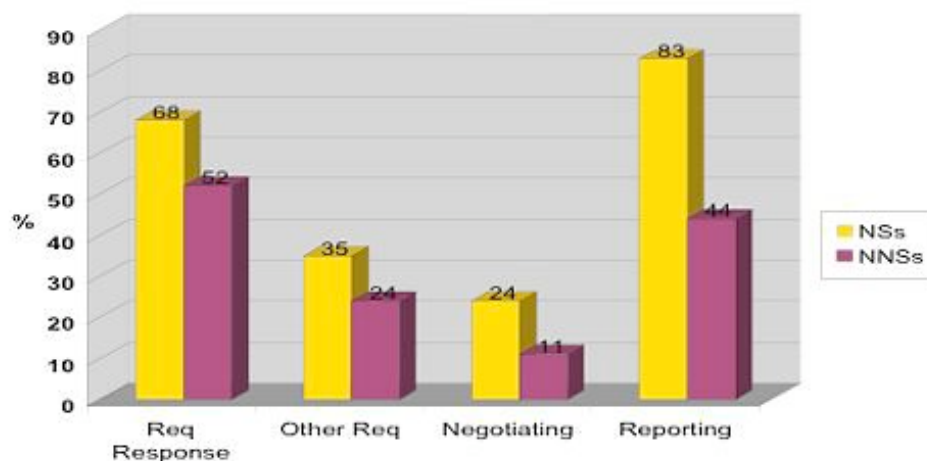


Figure 5. Percentage of messages exhibiting relational communication

An interesting observation concerns the amount of phatic information in a single message. The following example illustrates how some international students tended to latch multiple expressions of phatic language:

Dear Dr. ...  
 How are you? I hope you are enjoying weekend.  
 [here the student brings up an idea for a term project]  
 I appreciate your kind help and consideration in advance. Thank you for reading my personal

problem letter.  
 Have a great weekend!!!  
 See you next Wednesday.

In the above example, the student works very hard to set up and maintain good social relations with the professor, in what looks like several conversational turns collapsed into one. But such multiple latching of phatic expressions may detract from the substantive part of the e-mail message. If the student's goal is to get the professor's response to facilitative and substantive communication, a preponderance of phatic language might distract from a solicitation for feedback or response, as is illustrated by the following example (the actual request for response appears in *italics*):

Dear Dr. [name],

First, I would like to thank you for answering my mail and for being also open in your opinions. I am aware of the things I need to improve and I am seriously committed to that.

There isn't anything other than school and work that would jeopardize my performance in class, compare to the Fall when there were other things in my mind. Right now, I really want to do my best in school and I have to work harder to see good results.

Speaking of results, I know my lesson presentation was not great. But I understood the comments made in class by you and my classmates. *I sure would like to know how the written part (the lesson plan) looks like in order to start thinking in my next lesson.* [italics added]

### Communication Strategies

Another level of investigation in this study comprised the communication strategies used by the students to realize the various topics and purposes. Figure 6 shows overall percentages for e-mail messages distinguished by the four strategies examined: explicit requesting of response, requesting other services (clarification, permission, feedback, etc.), negotiating, and reporting.

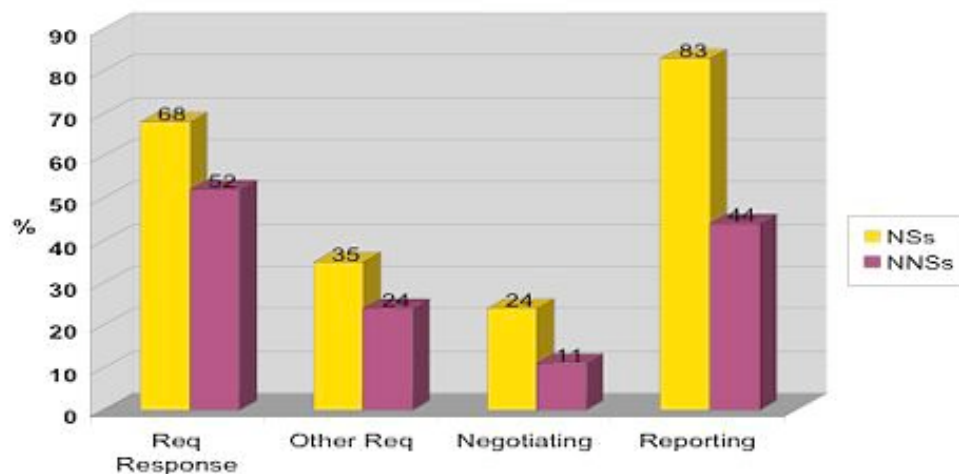


Figure 6. Communication strategies in students' e-mail messages

The figure indicates that both groups of students appear to be concerned with obtaining a response to their message as is shown in the percentage of messages containing explicit requests for response. The e-mail medium certainly accounts for this finding -- unlike in a face-to-face situation where turn-taking rules are more obvious -- the receiver of an e-mail message can defer the response to a message or can simply choose not to respond at all, resulting in lack of interactional coherence of the message exchange (Herring, 1999a, 2003). Thus, if a student wants to increase the chances that his or her message is responded to, the student has to encode this request explicitly, leaving the professor no choice but to respond -- otherwise, a deferred or non-response might be a breach of social turn-taking conventions (see



Condon & Cech, 1996a, for similar findings on explicit encoding of discourse functions in computer-mediated communication). However, this is also far more risky as appropriate linguistic realizations for these requests have to be chosen that do not come across as inappropriately impolite and imposing.

Figure 6 also indicates that American students' messages exhibited greater use of the examined communication strategies than messages from international students. Similar to Bardovi-Harlig and Hartford (1990), who also found more explicit and direct requests among American students and non-explicit and ambiguous forms among international students in their advising sessions, the present study suggests that this tendency is also evident in the e-mail medium. This gap was particularly apparent when considering the language function of reporting. Nearly all messages from the American students (83%) contained information on work in progress; in contrast, less than half the messages from the international students contained information that fulfilled the same purpose. By the same token, the strategy of negotiating -- despite smaller numbers -- showed an equally impressive gap between American and international students (24% vs. 11%, respectively). The implication of this finding will become more obvious in the discussion of the reporting and negotiating functions.

### ***Communication Strategies: Scheduling and Development of Viewpoint***

The potential significance of a difference between the two groups in the two strategies, reporting and negotiating, is illustrated in Figures 7 and 8, which isolate the language strategies examined for two of the communication topics: scheduling and development of viewpoint. With respect to scheduling, American students reported more than explicitly soliciting a response to a request for a meeting. In contrast, international students' messages show twice as many explicit requests for response to scheduling concerns than they reported on their work (Figure 7).

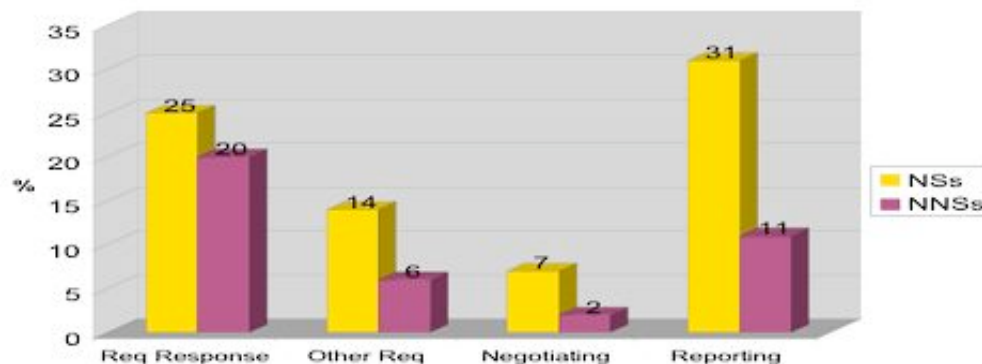


Figure 7. Communication strategies within scheduling topic

The difference between the two groups was also qualitative: When reporting within the scheduling communication topic, American students reported on what their own schedule was, when they could or could not be available, thus in fact suggesting a possible meeting date and time with the professor. This is a highly effective strategy through which a lot of information is packed into a single message turn (Condon & Cech, 1996a), and now the professor could respond to a more limited set of options and thereby increase the chance of determining a mutually agreeable meeting day/time. For example,

It is a little difficult for me to meet with you during your normal office hours and time is limited after class on Tuesday nights. ... I wonder if I could meet with you after work this Wednesday or Thursday at 5:00.

If you are available, I would like to discuss my portfolio with you. [Name] said Wednesdays are best. I teach every AM until 1:00. I would like to suggest 2:00 PM or later on August 12.

In contrast, international students simply made request for a meeting without suggesting any options, thus initiating a possibly lengthy exchange to find a day and time slot that is mutually agreeable to both professor and student. For example,

I would be able to see you Thursday morning, but I don't know how busy you may be.

I'd like to consult on selection of papers with you ASAP. Please let me know when is convenient for you.

This apparent importance of the reporting and negotiating strategies in setting up increased feedback opportunities was even more obvious when considering the communication topic of development of viewpoint, shown in Figure 8. The preponderance of reporting is more dramatic here than for other topics. Even though negotiating did not appear to be very different quantitatively for American and international students, there was a distinct qualitative difference between the two groups, which illustrates how American students used the e-mail medium as an additional resource for obtaining instructor feedback on project ideas (Biesenbach-Lucas, 2000; Biesenbach-Lucas & Weasenforth, 2002).

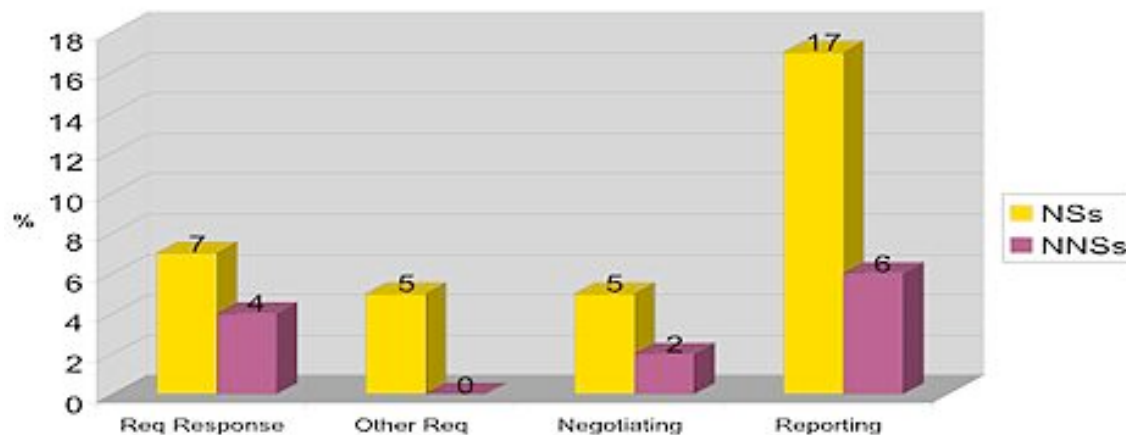


Figure 8. Communication strategies within development of viewpoint topic

The greater initiative taken by the American students also shows their ability to adapt to the limitations of the e-mail medium and results in multiple potential points for the professor to address his/her feedback to suggested steps in the process of accomplishing a particular assignment (Biesenbach-Lucas & Weasenforth, 2000, 2002; Herring, 1999a); it also highlights their independence and motivation (Bardovi-Harlig & Hartford, 1990). The following examples illustrate this contrast (the possible feedback points in each example are indicated by \*):

American graduate student:

I would like to try to come up with a speaking test that \*involves peer- and self-assessment. I'm thinking about a \*pairwork speaking test where 1s is given a very \*simple drawing -- probably of a street/houses/stores in conjunction with \*a lesson on directions and prepositions of place -- and must \*describe what is depicted so that the \*others can faithfully reproduce it from the description. \*It requires both students to participate twice (reversing roles describing and asking for clarification) \*so that they can be scored equally. \*Each time should take less than 10 min. Then \*each assesses each other and themselves.

International graduate student:

I am interested in TOEFL which I am familiar with, because I took TOEFL several times. \*What kind of topic will be possible, for example?

These examples demonstrate that feedback addressed at the American student, who elaborated on the proposal, could be much more constructive than feedback addressed at the international student, who merely suggested a vague experiential topic option, but did not offer any thoughts and initiative as to how to progress in completing the assignment (see Bardovi-Harlig & Hartford, 1990, for similar findings in face-to-face advising sessions). The professor had to probe into the student's interests and ideas before being able to offer any feedback on development of viewpoint, and this exchange extended over a week.

Bardovi-Harlig and Hartford (1990) observed that in successful face-to-face advising sessions the bulk of negotiation work consisted of both suggestions and rejections from both parties, that is, the advisor as well as the student. By extension, successful e-mail consultations appear to be those in which students self-initiate information regarding schedule or projects. The findings in the present study mirror those by Bardovi-Harlig and Hartford in that American students initiate progress reports and negotiations of, for example, scheduling and developing viewpoints with more response options, demonstrating in part their adaptation to the limitations of the medium, while international students provide more vague and general statements instead of more elaborate proposals with feedback points.

The same cultural assumptions that are at work in face-to-face advising sessions extend apparently also into student-faculty consultation at a distance. Thus, for international students, it is not the students' expected role to either initiate project topics on their own, to suggest day/time to meet with the professor as this might be considered an undermining of the professor's authority. Assumptions about how much initiative to demonstrate via e-mail set the international students apart from their American counterparts and show that they do not share the same "context-specific pragmatic knowledge" (Bardovi-Harlig & Hartford, 1990, p. 468) nor the adaptability to the electronic medium as American students in an increasingly more common communication venue between students and faculty at American universities. These findings imply that pre-academic ESL instruction needs to address what is and is not appropriate to negotiate with faculty at universities in North America, of which e-mail is a small, but increasingly important, part.

## CONCLUSION AND SUGGESTIONS FOR FURTHER RESEARCH

The goal of the present study was to examine which communication topics students addressed with faculty, what strategies students used to realize the topics, and to compare these for American and international university students. The study was conducted over the course of one semester in a teacher training program and can provide insights into what international students at American universities need to be aware of to gain access to the academic discourse community and to achieve satisfactory e-mail interactions with their professors. The major findings were as follows:

- Among the three major communication topics (facilitative, substantive, relational), messages from both groups of students addressed largely facilitative aspects, especially scheduling appointments and submission of work; however, this was the case for a larger percentage of messages from American students than from international students.
- Both groups of student addressed only half as many substantive topics as facilitative topics, but messages from American students tended to address development of viewpoint in attempts at obtaining the instructor's input on work in progress while international students were more concerned with evaluation of a final product.
- Relational communication topics (i.e. positive comments about the course as well as purely phatic comments) occurred in nearly two thirds of the messages from both groups of students, demonstrating their concern with establishing rapport across the spatial and temporal distances imposed through e-mail.
- Analysis of communication strategies revealed that American students took greater initiative in providing progress reports, negotiating project topics, and requesting instructor responses, not only quantitatively, but also qualitatively by providing more potential response points for the

professor than international students. This shows an intriguing adaptive ability to the limitations imposed by e-mail as also observed by Condon and Cech (1996a) and Herring (1999a).

Taken together, these findings mirror those in Bardovi-Harlig and Hartford's (1990, 1993b) studies of face-to-face academic advising sessions. As in these advising sessions, the American students in the present study also displayed greater initiative than the international students in their virtual e-mail consultation with their professor by setting up face-to-face appointments, addressing substantive issues and obtaining input, and by their ability to collapse a potentially lengthy e-mail exchange into one effective message providing multiple response points for the professor. As in Bardovi-Harlig and Hartford's studies, issues of culture and second language ability account for this difference: international students are unfamiliar with general values and norms in North American universities, and the cultural values they bring with them are often in contrast with those they encounter in the American setting; further, as non-native speakers of English, the sociopragmatic and pragmalinguistic resources of international students are more limited than those of native-speaking peers.

In addition, these difficulties are coupled with, and perhaps exacerbated in, the electronic medium through which virtual e-mail consultations are conducted. Many international students have very little experience with the e-mail medium in their home countries; Gu (2004) reports that in China it is not uncommon for several students to share one computer and one e-mail address, and never to have written an e-mail message in English. Therefore, as is the case for face-to-face interaction, non-native speakers of English studying in the United States need to be made aware of what is the appropriate relationship between professors and their students in the American context. The cultural and academic orientations that are typically conducted at most universities in North America upon the arrival of international students should include an orientation to e-mail consultations with faculty, that is, an explanation of the purposes for which e-mail can and cannot be used, along with recommendations for how to compose effective messages. Pre-academic ESL writing instruction could also provide direct instruction in e-mail composition and practice with raising facilitative and substantive aspects in e-mail messages to faculty so that these topics are clear and well structured. Finally, instructors at American universities could let students, whether they are American or international, know explicitly for what purposes they consider e-mail from students appropriate; for example, while some professors invite students to submit drafts of work for in-progress feedback, other professors might not consider this acceptable.

One limitation of the present study is the fact that the findings could have benefited from triangulation with qualitative interview data, surveys, and introspective reports of students', especially international students', perceptions of and attitudes toward what is appropriate interaction -- e-mail and face-to-face -- with professors at a university. Likewise, perceptions of professors regarding their students' e-mail communication would have been useful, but the present study had as its main goal the comparison of communication topics and strategies addressed by American and international students; thus, an examination of students' and professor's perceptions and attitudes toward e-mail interaction between students and faculty would be important to address in future research, as would be the perceived appropriateness of communication purposes and strategies in a survey administered to university faculty.

It is likely that communication topics and strategies of students enrolled at other universities and in other academic programs vary although they may fall under the same general labels of facilitative, substantive, and relational (see Collins, 1998; Gatz & Hirt, 2000, for an examination of such changes). This would be worth investigating. Another useful avenue of research would be to compare communication topics of students in one program over several semesters; this might shed light on whether or not familiarity with both program and professor, as well as with e-mail, influences communication topics and their frequency in e-mail messages. Collins, for example, found that his students' e-mail use increased after the first semester. It would also be intriguing to compare the findings from the present study with e-mail messages sent by students in courses supported by an extensive technology network including course web sites, synchronous chat, and asynchronous discussion boards. Some research suggests that students in courses

enhanced by such technology are more computer-literate and thus more likely to use e-mail for conferencing purposes with their instructors (Haworth, 1999; Ronau & Stoble, 1999). In addition, whether or not students use e-mail as a means to communicate with faculty may be related to students' learning styles. Some recent studies have related introversion and reticence to increased e-mail use (Kelly, Duran, & Zolten, 2001; Kunderewicz, Michener, & Chambliss, 2001), but other personality and learning styles could also be investigated. Also, as e-mail use is growing in other countries, and thus in other academic environments, further research on electronic student-professor consultations could be conducted in such different sociolinguistic and cultural contexts for larger-scale cross-cultural comparison.

As more e-mail addresses are finding their way onto professors' course syllabi, more students are using e-mail to initiate interaction with faculty, and more faculty encourage this mode of communication (Abdullah, 1998; McKeage, 2001; Stallworth, 1998; Warschauer, Shetzer, & Meloni, 2000). Many international students, however, come from countries where technology is much less supported and less reliable than in the United States (Gu, 2004) and may fulfill different purposes for interaction with university faculty. The present study has shown that American students demonstrated initiative and availed themselves of the e-mail medium in ways that may be beneficial for their academic success in their courses. By setting up face-to-face meetings via e-mail, by soliciting professors' input on project ideas and work in progress, these students increased their opportunities for successful completion of course work. International students at American universities need to be aware of how native speakers of English use the electronic medium and how to do this in an effective, yet status-congruent manner. As Boxer (2002) points out, "in the educational domain, the repercussions for not knowing the appropriate norms for verbal interaction are serious indeed" (p. 159), and e-mail interaction adds an additional medium in which the repercussions for not knowing appropriate norms for interaction are equally serious.

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## ABOUT THE AUTHOR

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